

Sequence Range: 1 to 4500

```

      10      20      30      40      50      60
CACTCGCTGATTGGTCGCTGCTCGCGCGGTCTCCTGGGTGACGGGAACGCGGTAGCCTGC
GTGAGCGACTAACCAGCGACGAGCGCGCCAGAGGACCCACTGCCCTTGCGCCATCGGACG
  H  S  L  I  G  R  C  S  R  G  L  L  G  D  G  N  A  V  A  C>

      70      80      90     100     110     120
TTGGTGGAGACCGGGTGC GCCTGCGTACTTCATAGTTCGCGTAGCGGCTCGAGCGTGGAG
AACCACCTCTGGCCACGCGGACGCATGAAGTATCAAGCGCATCGCCGAGCTCGCACCTC
  L  V  E  T  G  C  A  C  V  L  H  S  S  R  S  G  S  S  V  E>

     130     140     150     160     170     180
ATGAAGCGTATTTTCTCACTGCTAGAAAAGACTTGGCTTGGCGCACCAATACAGTTTGCC
TACTTCGCATAAAAGAGTGACGATCTTTTCTGAACCGAACCGGTGGTTATGTCAAACGG
  M  K  R  I  F  S  L  L  E  K  T  W  L  G  A  P  I  Q  F  A>

     190     200     210     220     230     240
TGGCAAAAAACATCAGGAAACTACCTTG CAGTAACAGGAGCTGATTATATTGTGAAAATC
ACCGTTTTTTGTAGTCCTTTGATGGAACGTCATTGTCCTCGACTAATATAACACTTTTAG
  W  Q  K  T  S  G  N  Y  L  A  V  T  G  A  D  Y  I  V  K  I>

     250     260     270     280     290     300
TTTGATCGCCATGGTCAAAAAAGAAGTGAAATTAACCTACCTGGTAACTGTGTTGCCATG
AAACTAGCGGTACCACTTTTTTCTTCACTTTAATTGAATGGACCATTGACACAACGGTAC
  F  D  R  H  G  Q  K  R  S  E  I  N  L  P  G  N  C  V  A  M>

     310     320     330     340     350     360
GATTGGGATAAAGATGGAGATGTCCTAGCAGTGATTGCTGAGAAATCTAGCTGCATTTAT
CTAACCTATTTCTACCTCTACAGGATCGTCACTAACGACTCTTTAGATCGACGTAAATA
  D  W  D  K  D  G  D  V  L  A  V  I  A  E  K  S  S  C  I  Y>

     370     380     390     400     410     420
CTTTGGGATGCCAACACAAATAAGACCAGCCAGTTAGACAATGGCATGAGGGATCAAATG
GAAACCCTACGGTTGTGTTTATTCTGGTCGGTCAATCTGTTACCGTACTCCCTAGTTTAC
  L  W  D  A  N  T  N  K  T  S  Q  L  D  N  G  M  R  D  Q  M>

     430     440     450     460     470     480
TCTTTCCTTCTTTGGTCAAAAGTTGGAAGTTTCCTGGCTGTTGGAAGTGTAAAGGAAAT
AGAAAGGAAGAAACCACTTTTCAACCTTCAAAGGACCGACAACCTTGACAATTTCCTTTA
  S  F  L  L  W  S  K  V  G  S  F  L  A  V  G  T  V  K  G  N>

     490     500     510     520     530     540
TTGSTTATTTATAATCATCAGACATCTCGAAAGATTCCCTGTCCTTGGAACATACTAAG
AACSAATAAATATTAGTAGTCTGTAGAGCTTTCTAAGGACAGGAACCTTTTGTATGATTC
  L  X  I  Y  N  H  Q  T  S  R  K  I  P  V  L  G  K  H  T  K>

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FIGURE 1 (Page 1 of 9)

550 560 570 580 590 600  
AGAATCACTTGTGGATGTTGGAATGCAGAAAATCTGCTGCTTTAGGTGGTGAAGATAAA  
TCTTAGTGAACACCTACAACCTTACGTCTTTTAGACGRACGAAATCCACCACTTCTATTT  
R I T C G C W N A E N L X A L G G E D K>

610 620 630 640 650 660  
ATGATTACAGTTAGTAATCAGGAAGGTGACACGATAAGACAGACACAAGTGAGATCAGAG  
TACTAATGTCAATCATTAGTCCTTCCACTGTGCTATTCTGTCTGTGTTCACTCTAGTCTC  
M I T V S N Q E G D T I R Q T Q V R S E>

670 680 690 700 710 720  
CCTAKCAACATGCAGTTTTTCTTGATGAAGATGGATGACCGAACCTCTGCTGCTGAAAGC  
GGATMGTTGTACGTCAAAAAGAACTACTTCTACCTACTGGCTTGGAGACGACGACTTTCG  
P X N M Q F F L M K M D D R T S A A E S>

730 740 750 760 770 780  
ATGATAAGTGTGGTGCTTGGCAAGAAAACCTTTGTTTTTTTTAAATCTGAATGAACCAGAT  
TACTATTACACCACGAACCGTTCTTTGAAACAAAAAAATTTAGACTTACTTGGTCTA  
M I S V V L G K K T L F F L N L N E P D>

790 800 810 820 830 840  
AACCCAGCTGATCTTGAATTTTCAGCAGGACTTTGGCAACATTGTCTGCTATAATTGGTAT  
TTGGGTCGACTAGAACTTAAAGTCGTCCTGAAACCGTTGTAACAGACGATATTAACCATA  
N P A D L E F Q Q D F G N I V C Y N W Y>

850 860 870 880 890 900  
GGTGATGGCCGCATCATGATTGGTTTTTCATGTGGACATTTTGTGGTCATTTCTACTCAT  
CCACTACCGGCGTAGTACTAACC AAAAGTACACCTGTAA AACACCCAGTAAAGATGAGTA  
G D G R I M I G F S C G H F V V I S T H>

910 920 930 940 950 960  
ACTGGAGAGCTTGGTCAAGAGATATTTTCAGGCTCGTAACCATAAAGATAATCTAACCAGC  
TGACCTCTCGAACCACTTCTCTATAAAGTCCGAGCATTGGTATTTCTATTAGATTGGTGC  
T G E L G Q E I F Q A R N H K D N L T S>

970 980 990 1000 1010 1020  
ATTGCAGTATCACAGACTCTTAACAAAGTTGCTACATGTGGAGATAACTGCATTAAAATC  
TAACGTCATAGTGTCTGAGAATTGTTTCAACGATGTACACCTCTATTGACGTAATTTTAG  
I A V S Q T L N K V A T C G D N C I K I>

1030 1040 1050 1060 1070 1080  
CAAGACTTGGTTGACTTAAAAGACATGTATGTTATACTCAACCTGGATGAGGAAAATAAA  
GTTCTGAACCAACTGAATTTTCTGTACATACAATATGAGTTGGACCTACTCCTTTTATTT  
Q D L V D L K D M Y V I L N L D E E N K>

**FIGURE 1 (Page 2 of 9)**

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1090      1100      1110      1120      1130      1140
GGATTGGGTACCTTGTCTGGACTGATGATGGCCAGTTGCTAGCACTCTCTACCCAAAGG
CCTAACCCATGGAACAGGACCTGACTACTACCGGTCAACGATCGTGAGAGATGGGTTTCC
G L G T L S W T D D G Q L L A L S T Q R>

1150      1160      1170      1180      1190      1200
GGCTCACTTCATGTTTTCTGACCAAGCTTCCCATACTTGGGGATGCCTGCAGCACAAGG
CCGAGTGAAGTACAAAAGGACTGGTTCTGAAGGGTATGAACCCCTACGGACGTCGTGTTCC
G S L H V F L T K L P I L G D A C S T R>

1210      1220      1230      1240      1250      1260
ATTGCCTATCTCACCTCCCTCCTTGAAGTCACCGTAGCCAACCCTGTTGAAGGAGAGCTA
TAACGGATAGAGTGGAGGGAGGAACCTTCAGTGGCATCGGTTGGGACAACCTTCCTCTCGAT
I A Y L T S L L E V T V A N P V E G E L>

1270      1280      1290      1300      1310      1320
CCAATCACAGTTTCTGTTGATGTGGAACCCAACTTTGTGGCAGTAGGTCTTTATCATCTG
GGTTAGTGTCAAAGACAACCTACACCTTGGGTTGAAACACCGTCATCCAGAAATAGTAGAC
P I T V S V D V E P N F V A V G L Y H L>

1330      1340      1350      1360      1370      1380
GCTGTAGGAATGAATAATCGAGCTTGGTTTTATGTCCTTGGAGAAAATGCTGTGAAAAAA
CGACATCCTTACTTATTAGCTCGAACCAAAAATACAGGAACCTCTTTTACGACACTTTTTT
A V G M N N R A W F Y V L G E N A V K K>

1390      1400      1410      1420      1430      1440
TTGAAAGATATGGAGTATCTGGGAACAGTAGCCAGTATTTGCCTTCATTCTGACTATGCT
AACTTTCTATACCTCATAGACCCCTTGTCATCGGTCATAAACGGAAGTAAGACTGATACGA
L K D M E Y L G T V A S I C L H S D Y A>

1450      1460      1470      1480      1490      1500
GCTGCACTTTTTGAAGGCAAAGTCCAGTTACATTTGATAGAAAGCGAAATCTTGGATGCT
CGACGTGAAAAACTTCCGTTTCAGGTCAATGTAACTATCTTTTCGCTTTAGAACCTACGA
A A L F E G K V Q L H L I E S E I L D A>

1510      1520      1530      1540      1550      1560
CAAGAAGAACGTGAGACTCGGCTTTTCCAGCAGTGGATGATAAGTGCCGTATCTTATGC
GTTCTTCTTGCACTCTGAGCCGAAAAGGGTCGTCACCTACTATTACGGCATAGAATACG
Q E E R E T R L F P A V D D K C R I L C>

1570      1580      1590      1600      1610      1620
CATGCCTTAAGTAGTGATTTCTCATCTATGGTACAGATACTGGTGTGCGTTTCAGTATTT
GTACGGAATTGATCACTAAAGGAGTAGATACCATGTCTATGACCACAGCAAGTCATAAAG
H A L T S D F L I Y G T D T G V V Q Y F>

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**FIGURE 1 (Page 3 of 9)**

1630 1640 1650 1660 1670 1680  
TACATTGAAGACTGGCAATTCGTTAATGATTATCGACATCCTGTCAGTGTGAAAAAGATT  
ATGTAACCTTCTGACCGTTAAGCAATTACTAATAGCTGTAGGACAGTCACACTTTTTCTAA  
Y I E D W Q F V N D Y R H P V S V K K I>

1690 1700 1710 1720 1730 1740  
TTTCCCGACCCAAATGGGACCAGATTAGTTTTTCATTGATGAAAAAAGTGATGGATTTGTT  
AAAGGGCTGGGTTTACCCTGGTCTAATCAAAAGTAACTACTTTTTTCACTACCTAAACAA  
F P D P N G T R L V F I D E K S D G F V>

1750 1760 1770 1780 1790 1800  
TACTGTCCAGTCAATGACGCTACCTATGAGATTCCAGATTTTTCACCAACCATTAAAGGT  
ATGACAGGTCAGTTACTGCGATGGATACTCTAAGGTCTAAAAAGTGGTTGGTAATTTCCA  
Y C P V N D A T Y E I P D F S P T I K G>

1810 1820 1830 1840 1850 1860  
GTTCTTTGGGAAAACCTGGCCAATGGATAAAGGTGTATTTATTGCTTATGATGATGATAAG  
CAAGAAACCCCTTTTGACCGGTTACCTATTTCCACATAAATAACGAATACTACTACTATTC  
V L W E N W P M D K G V F I A Y D D D K>

1870 1880 1890 1900 1910 1920  
GTGTACACTTATGTCTTTTACAAGGACACTATACAAGGAGCCAAGGTTATTTTGGCTGGT  
CACATGTGAATACAGAAAGTGTTCCCTGTGATATGTTCCCTCGGTTCCAATAAAACCGACCA  
V Y T Y V F H K D T I Q G A K V I L A G>

1930 1940 1950 1960 1970 1980  
AGCACCAAAGTTCCCTTTTGCTCATAAACCTTTGCTGCTATATAATGGAGAGCTGACCTGC  
TCGTGGTTTCAAGGAAAACGAGTATTTGGAAACGACGATATATTACCTCTCGACTGGACG  
S T K V P F A H K P L L L Y N G E L T C>

1990 2000 2010 2020 2030 2040  
CAAAACACAGAGTGGAAGTAAACAACATCTACCTTAGCACCCATGGCTTTTCTCAGCAAC  
GTTTGTGTCTCACCTTTTCAATTTGTTGTAGATGGAATCGTGGGTACCGAAAGAGTCGTTG  
Q T Q S G K V N N I Y L S T H G F L S N>

2050 2060 2070 2080 2090 2100  
TTAAAAGATASGGGGCCTGACGAACTGAGACCAATGCTGGCACACAATTTAATGCTAAAG  
AATTTTCTATSCCCCGGACTGCTTGACTCTGGTTACGACCGTGTGTTAAATTACGATTTCT  
L K D X G P D E L R P M L A H N L M L K>

2110 2120 2130 2140 2150 2160  
AGGTTTTCTGATGCTTGGGAAATGTGCAGGATTCTGAATGATGAGGCTGCCTGGAATGAG  
TCCAAAAGACTACGAACCCTTTACAGTCCTAAGACTTACTACTCCGACGGACCTTACTC  
R F S D A W E M C R I L N D E A A W N E>

**FIGURE 1 (Page 4 of 9)**

2170 2180 2190 2200 2210 2220  
TTGGCCAGAGCTTGTCTACATCACATGGAAGTGGAGTTTGCAATCCGTGTTTATCGGAGA  
AACCGGTCTCGAACAGATGTAGTGACCTTCACCTCAAACGTTAGGCACAAATAGCCTCT  
L A R A C L H H M E V E F A I R V Y R R>

2230 2240 2250 2260 2270 2280  
ATTGGAAATGTTGGCATAGTGATGTCCTTGAACAAATAAAGGGAATAGAGGACTACAAT  
TAACCTTTACAACCGTATCACTACAGGAACCTTGTTTATTTCCCTTATCTCCTGATGTTA  
I G N V G I V M S L E Q I K G I E D Y N>

2290 2300 2310 2320 2330 2340  
CTTTTGGCAGGACACCTTGCCATGTTTACCAACGATTATAACCTGGCTCAGGACTTGTAC  
GAAAACCGTCCGTGTGGAACGGTACAAATGGTTGCTAATATTGGACCGAGTCCTGAACATG  
L L A G H L A M F T N D Y N L A Q D L Y>

2350 2360 2370 2380 2390 2400  
CTTGCAATCCAGCTGTCCTATTGCTGCCCTGGAGATGAGAAGGGATTACAGCATTGGGAC  
GAACGTAGGTTCGACAGGATAACGACGGGACCTCTACTCTCCCTAAATGTCGTAACCTG  
L A S S C P I A A L E M R R D L Q H W D>

2410 2420 2430 2440 2450 2460  
AGTGCTCTACAACCTGGCAAAGCATTGGCCCCAGACCAGATACCTTTTATATCAAAAGAA  
TCACGAGATGTTGACCGTTTCGTAAACCGGGGTCTGGTCTATGGAAAATATAGTTTCTT  
S A L Q L A K H L A P D Q I P F I S K E>

2470 2480 2490 2500 2510 2520  
TATGCTATTTCAGCTTGAATTCGCGGGTGATTATGTAAATGCTTTGGCTCATTATGAGAAA  
ATACGATAAGTCGAACCTTAAGCGCCCACTAATACATTACGAAACCGAGTAATACTCTTT  
Y A I Q L E F A G D Y V N A L A H Y E K>

2530 2540 2550 2560 2570 2580  
GGAATAACAGGTGATAATAAGGAACATGATGAAGCTTGTCTGGCTGGAGTGGCCCAGATG  
CCTTATTGTCCACTATTATTCCTTGTACTACTTCGAACAGACCGACCTCACCGGGTCTAC  
G I T G D N K E H D E A C L A G V A Q M>

2590 2600 2610 2620 2630 2640  
TCCATAAGAATGGGAGACATACGTCGAGGGGTTAACCAAGCCCTCAAGCATCCCAGCAGG  
AGGTATTCTTACCCTCTGTATGCAGCTCCCCAATTGGTTCGGGAGTTCGTAGGGTCGTCC  
S I R M G D I R R G V N Q A L K H P S R>

2650 2660 2670 2680 2690 2700  
GTCCTTAAAAGAGACTGTGGAGCCATATTGGAGAATATGAAGCAATTTTCAGAAGCGGCC  
CAGGAATTTTCTCTGACACCTCGGTATAACCTCTTATACTTCGTTAAAAGTCTTCGCCGG  
V L K R D C G A I L E N M K Q F S E A A>

**FIGURE 1 (Page 5 of 9)**

2710 2720 2730 2740 2750 2760  
CAACTGTATGAAAAAGGTCTCTACTACGATAAAGCAGCATCTGTTTACATCCGCTCTAAG  
GTTGACATACTTTTTCCAGAGATGATGCTATTTTCGTCGTAGACAAATGTAGGCGAGATTC  
Q L Y E K G L Y Y D K A A S V Y I R S K>

2770 2780 2790 2800 2810 2820  
AATTGGGCAAAAGTTGGTGATCTTCTGCCCCACGTTTCTTCTCCTAAGATCCATTTGCAG  
TTAACCCGTTTTCAACCACTAGAAGACGGGGTGCAAAGAAGAGGATTCTAGGTAAACGTC  
N W A K V G D L L P H V S S P K I H L Q>

2830 2840 2850 2860 2870 2880  
TATGCCAAAGCCAAGGAAGCAGATGGAAGATACAAAGAAGCTGTTGTAGCTTATGAAAAT  
ATACGGTTTCGGTTCCTTCGTCTACCTTCTATGTTTCTTCGACAACATCGAATACTTTTA  
Y A K A K E A D G R Y K E A V V A Y E N>

2890 2900 2910 2920 2930 2940  
GCAAAACAGTGGCAAAGTGTAATCCGCATCTATCTGGATCACCTCAATAATCCTGAAAAA  
CGTTTTGTCCCGTTTCACATTAGGCGTAGATAGACCTAGTGGAGTTATTAGGACTTTTT  
A K Q W Q S V I R I Y L D H L N N P E K>

2950 2960 2970 2980 2990 3000  
GCTGTCAATATTGTTAGAGAGACCCAGTCTCTGGATGGAGCCAAAATGGTAGCCAGGTTT  
CGACAGTTATAACAATCTCTCTGGGTGAGAGACCTACCTCGGTTTTACCATCGGTCCAAA  
A V N I V R E T Q S L D G A K M V A R F>

3010 3020 3030 3040 3050 3060  
TTTCTACAGCTTGGTGACTATGGGTCTGCCATCCAGTTTCTTGTTCATGTCCAAATGCAAC  
AAAGATGTGCAACCACTGATACCCAGACGGTAGGTCAAAGAACAGTACAGGTTTACGTTG  
F L Q L G D Y G S A I Q F L V M S K C N>

3070 3080 3090 3100 3110 3120  
AATGAAGCTTTCACACTGGCTCAGCAACACAACAAAATGGAAATCTATGCAGATATTATT  
TTACTTCGAAAGTGTGACCGAGTCGTTGTGTTGTTTTACCTTTAGATACGTCTATAATAA  
N E A F T L A Q Q H N K M E I Y A D I I>

3130 3140 3150 3160 3170 3180  
GGTTCTGAAGACACTACTAATGAAGACTATCAAAGCATTGCCTTATACTTTGAAGGAGAA  
CCAAGACTTCTGTGATGATTACTTCTGATAGTTTCGTAACGGAATATGAACTTCCTCTT  
G S E D T T N E D Y Q S I A L Y F E G E>

3190 3200 3210 3220 3230 3240  
AAGAGATATCTTCAGGCTGGAAAATTCTTCTTGCTGTGTGGCCAATATTCACGAGCACTT  
TTCTCTATAGAAGTCCGACCTTTTAAGAAGAACGACACACCGGTTATAAGTGCTCGTGAA  
K R Y L Q A G K F F L L C G Q Y S R A L>

**FIGURE 1 (Page 6 of 9)**

3250 3260 3270 3280 3290 3300  
AAACACTTCCTGAAATGCCCAAGCTCGGAAGATAATGTGGCAATAGAAATGGCAATTGAA  
TTTGTGAAGGACTTTACGGGTTTCGAGCCTTCTATTACACGTTATCTTTACCGTTAACTT  
K H F L K C P S S E D N V A I E M A I E>

3310 3320 3330 3340 3350 3360  
ACTGTTGGTCAGGCCAAAGATGAACTGCTGACCAATCAGCTGATAGACCATCTCCTGGGG  
TGACAACCACTCCGGTTTCTACTTGACGACTGGTTAGTCGACTATCTGGTAGAGGACCCC  
T V G Q A K D E L L T N Q L I D H L L G>

3370 3380 3390 3400 3410 3420  
GAGAACGATGGCATGCCTAAGGATGCCAAGTACCTGTTCCGCTTGTACATGGCTCTGAAG  
CTCTTGCTACCGTACGGATTCTACGGTTCATGGACAAGGCGAACATGTACCGAGACTTC  
E N D G M P K D A K Y L F R L Y M A L K>

3430 3440 3450 3460 3470 3480  
CAATACCGAGAAGCTGCCCAGACTGCCATCATCATTGCCAGAGAAGAGCAGTCTGCAGGC  
GTTATGGCTCTTCGACGGGTCTGACGGTAGTAGTAACGGTCTCTTCTCGTCAGACGTCCG  
Q Y R E A A Q T A I I I A R E E Q S A G>

3490 3500 3510 3520 3530 3540  
AACTACCGGAATGCACACGATGTTCTCTTCAGTATGTATGCAGAACTGAAATCCCAGAAG  
TTGATGGCCTTACGTGTGCTACAAGAGAAGTCATACATACGTCTTGACTTTAGGGTCTTC  
N Y R N A H D V L F S M Y A E L K S Q K>

3550 3560 3570 3580 3590 3600  
ATCAAAATTCCCTCCGAGATGGCCACCAACCTCATGATTCTGCACAGCTATATACTAGTA  
TAGTTTTAAGGGAGGCTCTACCGGTGGTTGGAGTACTAAGACGTGTGCATATATGATCAT  
I K I P S E M A T N L M I L H S Y I L V>

3610 3620 3630 3640 3650 3660  
AAGATTCATGTTAAAAATGGAGATCACATGAAAGGGGCTCGCATGCTCATTCGGGTGGCC  
TTCTAAGTACAATTTTTACCTCTAGTGTACTTTCCCCGAGCGTACGAGTAAGCCCACCGG  
K I H V K N G D H M K G A R M L I R V A>

3670 3680 3690 3700 3710 3720  
AACAAATCAGCAAATTTCCATCACACATTGTACCCATCCTGACGTCAACTGTGATTGAG  
TTGTTGTAGTCGTTTAAAGGTAGTGTGTAACATGGGTAGGACTGCAGTTGACACTAACTC  
N N I S K F P S H I V P I L T S T V I E>

3730 3740 3750 3760 3770 3780  
TGTCACAGGGCAGGCCTGAAGAACTCTGCTTTTCAGCTTCGCAGCTATGTTGATGAGGCCT  
ACAGTGTCCCGTCCGGACTTCTTGAGACGAAAGTCGAAGCGTCGATACAATACTCCGGA  
C H R A G L K N S A F S F A A M L M R P>

**FIGURE 1 (Page 7 of 9)**

3790 3800 3810 3820 3830 3840  
GAATACCGCAGCAAAATAGATGCCAAATACAAAAAGAAGATCGAGGGAATGGTCAGGAGA  
CTTATGGCGTCGTTTTATCTACGGTTTTATGTTTTCTTCTAGCTCCCTTACCAGTCCTCT  
E Y R S K I D A K Y K K K I E G M V R R>

3850 3860 3870 3880 3890 3900  
CCCGATATATCTGAGATAGAAGAGGCCACGACTCCATGTCCATTCTGCAAATTTCTTCTC  
GGGCTATATAGACTCTATCTTCTCCGGTGCTGAGGTACAGGTAAGACGTTTAAAGAAGAG  
P D I S E I E E A T T P C P F C K F L L>

3910 3920 3930 3940 3950 3960  
CCAGAGTGTGAACCTCTGTCTGGATGTAAAAACAGTATCCCATATTGCATTGCAACA  
GGTCTCACACTTGAGGAGACAGGACCTACATTTTTGTGCATAGGGTATAACGTAACGTTGT  
P E C E L L C P G C K N S I P Y C I A T>

3970 3980 3990 4000 4010 4020  
GGTCGACACATGTTGAAAGATGACTGGACGGTGTGTCCACATTGTGACTTCCCTGCTCTA  
CCAGCTGTGTACAACCTTCTACTGACCTGCCACACAGGTGTAACACTGAAGGGACGAGAT  
G R H M L K D D W T V C P H C D F P A L>

4030 4040 4050 4060 4070 4080  
TACTCAGAATTGAAGATCATGCTAAACACTGAAAGCACATGTCCTATGTGTTTCAGAAAGA  
ATGAGTCTTAACTTCTAGTACGATTTGTGACTTTCGTGTACAGGATACACAAGTCTTTCT  
Y S E L K I M L N T E S T C P M C S E R>

4090 4100 4110 4120 4130 4140  
TTAAACGCTGCTCAGCTGAAAAAGATTTTCAGACTGTACCCAGTACCTGCGAACGGAGGAG  
AATTTGCGACGAGTCGACTTTTTCTAAAGTCTGACATGGGTGATGGACGCTTGCCCTCCTC  
L N A A Q L K K I S D C T Q Y L R T E E>

4150 4160 4170 4180 4190 4200  
GAACTGTGATTGGCACGTGCAGATACAATGCTCCTGAGAAGACAGCATTTTCCACAGGAG  
CTTGACACTAACCGTGCACGTCTATGTTACGAGGACTCTTCTGTCGTAAGGTGTCCTC  
E L>  
\_\_\_\_\_>

4210 4220 4230 4240 4250 4260  
GCTGTTTCTCCTCCCTGGTGGATTTAAGAGACGGTCCTTTCTGGATACAGAGAAATGAAAC  
CGACAAAGGAGGGGACCACCTAAATTCTCTGCCAGGAAAGACCTATGTCTCTTTACTTTG

4270 4280 4290 4300 4310 4320  
AACGGTGACCTCTCCAGGTGCGCACTTTCCACTTCTGTACGGTGGCAAAACGATGACATG  
TTGCCACTGGAGAGGTCCAGCCGTGAAAGGTGAAGACATGCCACCGTTTTGCTACTGTAC

4330 4340 4350 4360 4370 4380  
TAACCTTGCTGTTTATTGTACTTTGTATATTATTTCTCTTCAAAGTCTTTCTTACACAC  
ATTGGAACGACAAATAACATGAAACATATAATAAAGGAGAAGTTTCAGAAAGAATGTGTG

4390 4400 4410 4420 4430 4440  
TCTATCCTCTGCACTGTTAATAGTAACCTATGACATAATTGTAAATATTCAGCTTTTTGC  
AGATAGGAGACGTGACAATTATCATTGGATACTGTATTAAACATTTATAAGTCGAAAAACG

**FIGURE 1 (Page 8 of 9)**



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4450 4460 4470 4480 4490 4500  
TAACTTTTGTATTTTGAAAACTTTAAAATAAAATTGTTGACTAGAAAAAAAAAAAAAAAA  
ATTGAAACATAAACTTTTGAATTTTATTTAACAACGATCTTTTTTTTTTTTTTTT

[illegible]

CAUTION: ESSENTIAL

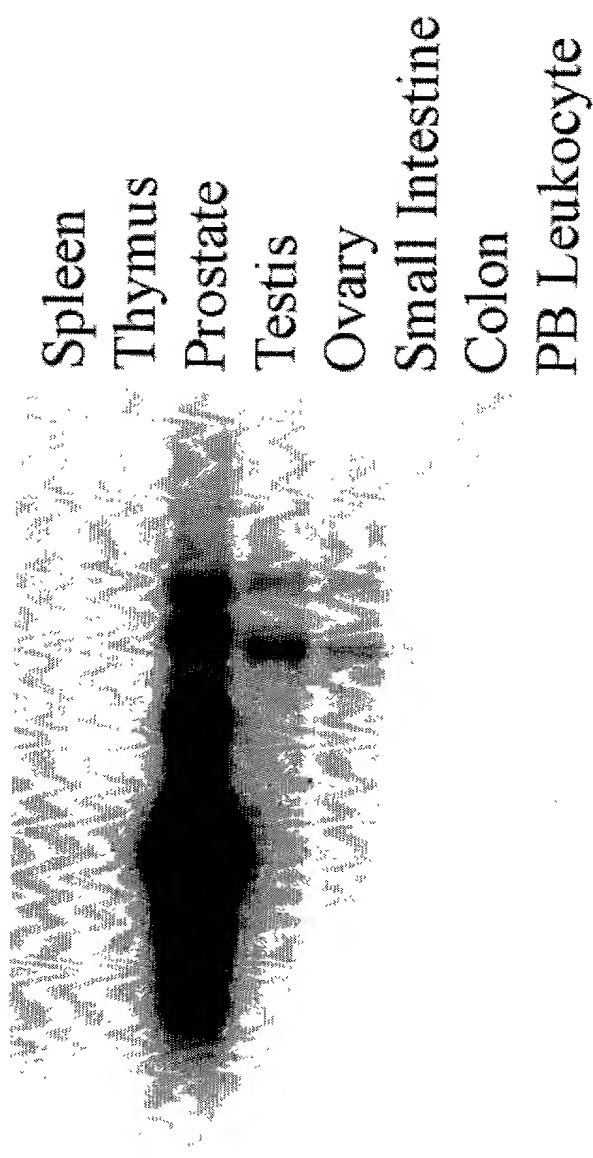
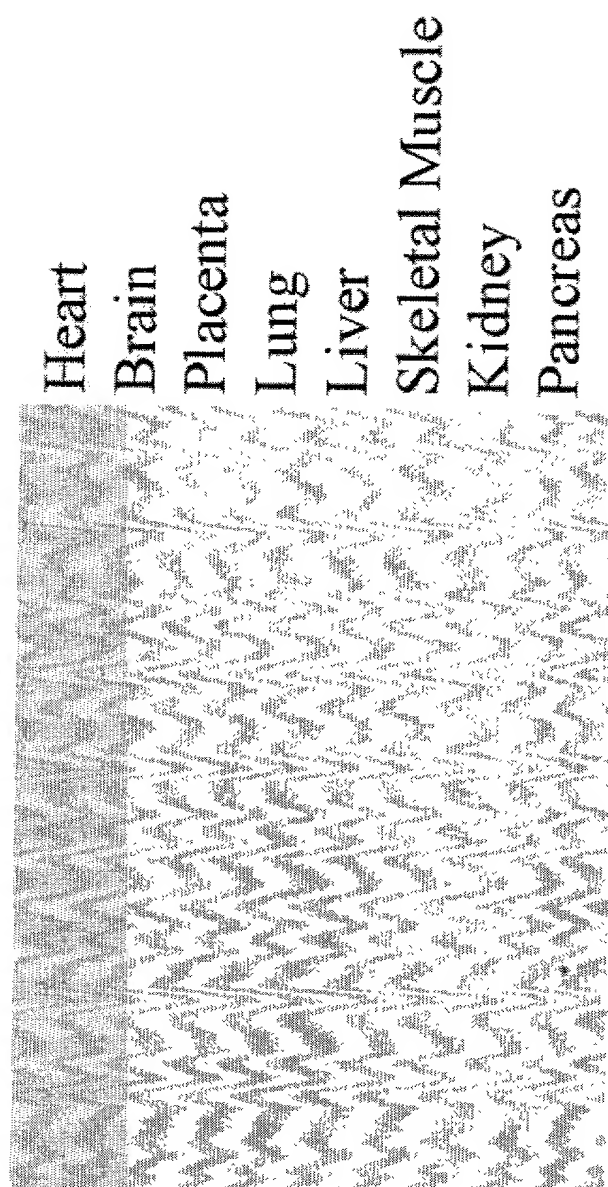


FIGURE 3

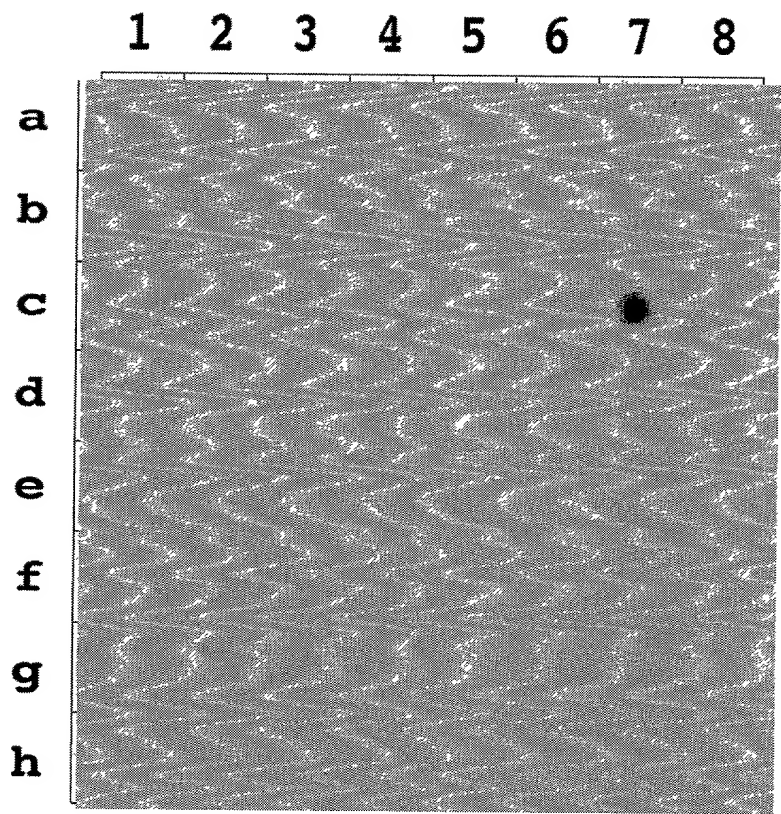
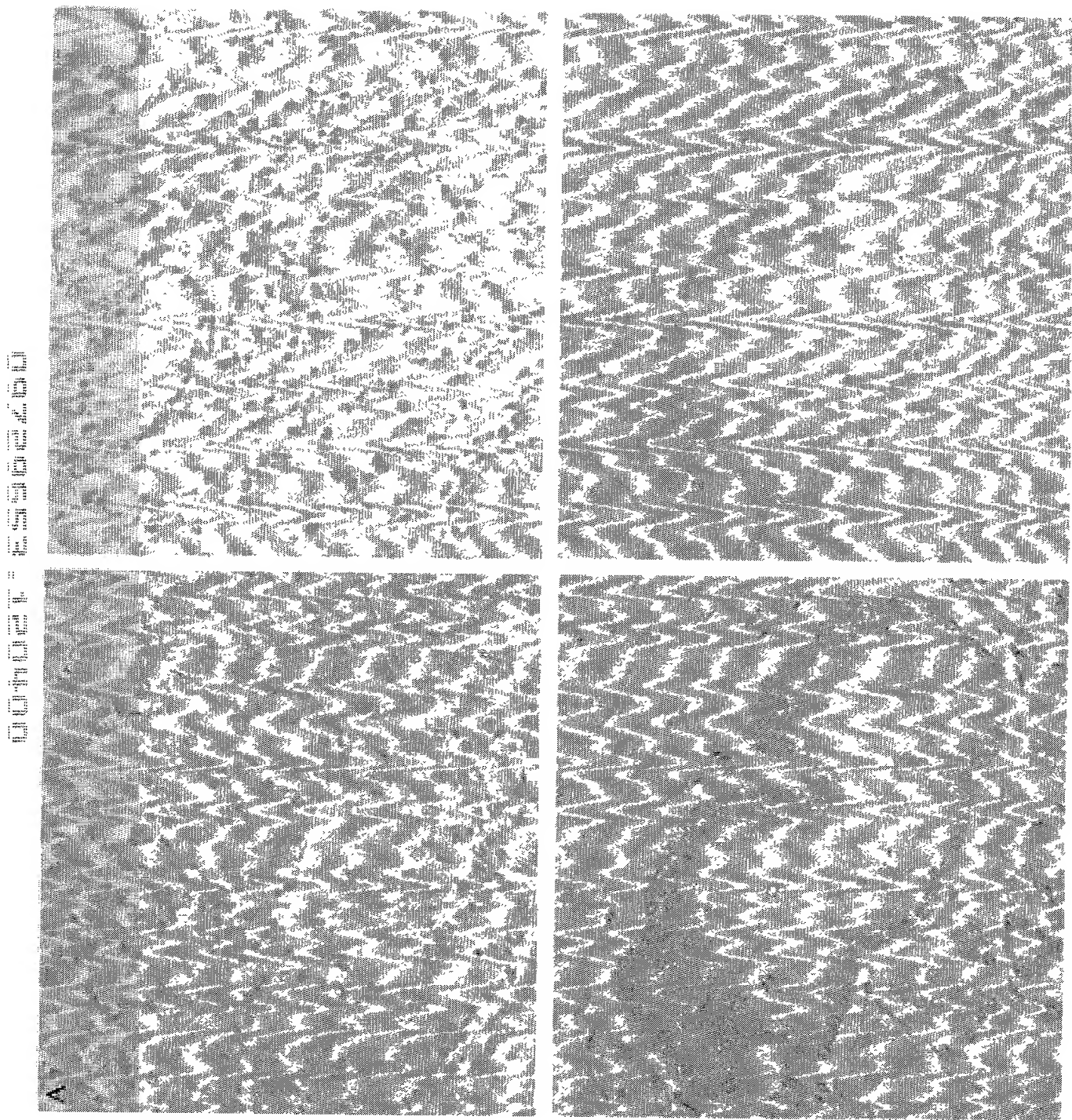


FIGURE 4

**Inventor: Biaoyang Lin**  
**Docket No.: P-IS 4367**



**FIGURE 5**